PTO/SB/05 (08-03)
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| UTILITY            |
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| PATENT APPLICATION |
| TRANSMITTAL        |

| pond to a collection of infor | mation unless it displays a valid OMB control nu                     | mber. |
|-------------------------------|--|-------|
| Attorney Docket No.           | 1875.3910000   |       |
| First Inventor                | Kevin Lee Miller   | ٦     |
| Title                         | System and Method For Mapping Pulse<br>Widths In a Digital Modulator | S O   |
| Express Mail Label No.        |  | 3     |
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| 13 (0.1.37) (0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1   | [ ] [ [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]              |   | Ex   | cpress  | Mail Labe             | el No.  | <u> </u>  |                         |             |  |
|--|--|---|--|---|-----------------------|---------|---|-------------------------|-------------|--|
| APPLI<br>See MPEP chapter 600  | CATION ELEMENTS  concerning utility patent applicate | ion contents.                             | AD   | DRE   | ESS TO                | ):      | Mail Stop Patent A<br>Commissioner for<br>P.O. Box 1450<br>Alexandria VA 22 | Patents                 | 10          |  |
| Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing)  Applicant claims small entity status. See 37 CFR 1.27.  |  |   |  | <ol> <li>CD-ROM or CD-R in duplicate, large table or Computer Progra (Appendix)</li> <li>Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)</li> <li>Computer Readable Form (CRF)</li> </ol> |                       |         |   |                         |             |  |
| 3. Specification (preferred arrangem - Descriptive title of - Cross Reference to - Statement Regardir - Reference to seque or a computer prog - Background of the  | <u>22</u> 1  | b. Specification Sequence Listing on:  i. |  |   |                       |         |   |                         |             |  |
| - Brief Summary of t   | the Invention  |   |  |   | ACC                   | OMP.    | ANYING APP  | LICATION PART           | ΓS          |  |
| - Detailed Descriptio<br>- Claim(s)<br>- Abstract of the Disc  | closure  | 0   | 9.<br>10.  | ⊠<br>□  | •                     | •       | pers (cover sheet of  | & document(s))          |             |  |
| 4. <b>☑</b> Drawing(s) (35)  | U.S.C. 113) [Total Sheets                            | 8 1                                       | 10.  | ш   | (when thei            |         |   | rower or Attorne.       | ,           |  |
| 5. Oath or Declaration   | [Total Pages   | <u>2</u> 1                                | 11.  |   | English 7             | Transla | tion Document (i)   | (applicable)            |             |  |
|  | uted (original or copy)                              | 1.62(4))                                  | 12.  |   | Informati<br>Statemen |         | sclosure<br>)/PTO-1449  | Copies of IDS Citations |             |  |
| b. Copy from a prior application (37 CFR 1.63(d))  (for continuation/divisional with Box 18 completed)   |  |   | 13. Preliminary Amendment  |   |                       |         |   |                         |             |  |
| <ul> <li>i. DELETION OF INVENTOR(S)         Signed statement attached deleting inventor(s)         named in the prior application, see 37 CFR         1.63(d)(2) and 1.33(b).</li> <li>6. ✓ Application Data Sheet. See 37 CFR 1.76.</li> </ul>  |  |   | 14.  |   |                       |         | Postcard (MPEP ically itemized)   | 503)                    |             |  |
|  |  |   | 15. Certified Copy of Priority Document(s) (if foreign priority is claimed)  |   |                       |         |   |                         |             |  |
|  |  |   | 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attact form PTO/SB/35 or its equivalent. |   |                       |         |   |                         |             |  |
|  |  |   |  | 17. Authorization under 37 C.F.R. § 1.136(a)(3)   |                       |         |   |                         |             |  |
|  |  |   |  | $\boxtimes$   | Other:                | The na  | ame of the assign   | ee is: Broadcom Co      | orporation  |  |
| 18. If a CONTINUING a or in an Application Data Sh   | APPLICATION, check appreeet under 37 CFR 1.76:       | opriate box, and supp                     | ply th   | e requ  | isite inforr          | mation  | below and in a p  | reliminary amendme      | nt,         |  |
| ☐ Continuation ☐ Divisional ☒ Continuation-in-Part (CIP) of prior application No: 10/642,736  Prior application information: Examiner <u>n/a</u> Art Unit: <u>n/a</u>  |  |   |  |   |                       |         |   |                         |             |  |
| For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. |  |   |  |   |                       |         |   |                         |             |  |
| _  |  | 19. CORRESPON                             | NDE  | NCE .   | ADDRES                | SS      |   |                         |             |  |
| Customer Number 26111 or Correspondence address below  |  |   |  |   |                       |         |   |                         |             |  |
| NAME STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.   |  |   |  |   |                       |         |   |                         |             |  |
|  | Attorneys at Law                                     |   |  |   |                       |         |   |                         |             |  |
| ADDRESS  |  |   |  |   |                       |         |   |                         |             |  |
| CITY   |  | STATE                                     |  |   |                       |         | ZIP CODE  |                         |             |  |
| COUNTRY  |  | TELEPHONE                                 |  |   |                       |         | FAX   |                         |             |  |
| NAME (Print/Type) Ex   | van R. Smith   |   |  | Pos   | istration N           | Vo. (4# | (approx/4gant) [3]  | 5 683                   | <del></del> |  |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

SIGNATURE

Date

30, 104

PTO/SB/17 (08-03)
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| FEE | <b>TRANSMITTAL</b> |
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|     | for FY 2004        |

Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

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| Application Number   | To Be Assigned  |  |  |  |  |  |
| Filing Date          | Her with (January 30, 2004)   |  |  |  |  |  |
| First Named Inventor | K vin Le MILLER   |  |  |  |  |  |
| Examiner Name        | To Be Assigned  |  |  |  |  |  |
| Art Unit             | To Be Assign d  |  |  |  |  |  |
| Attorney Docket No.  | 1875.3910000/RES/ERS  |  |  |  |  |  |

| METHOD OF DAVMENT (sheek all that apply)  |             |   |              |             |  |                                 |                         |
|---|-------------|---|--------------|-------------|--|---------------------------------|-------------------------|
| METHOD OF PAYMENT (check all that apply)  | 2 4         | FEE CALCULATION (continued)                   |              |             |  |                                 |                         |
| Charge by deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036. |             | 3. ADDITIONAL FEES  Large Entity Small Entity |              |             |  |                                 |                         |
| Deposit Account   | Fee<br>Code | Fee Fe  |              |             | Fee Description                              |                                 | Fee Paid                |
| Deposit Account Number 19-0036  | 1051        | 130   | 2051         | 65          | Surcharge - late filing f                    | ee or oath                      |                         |
| Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.c.   | 1502        |   | 2052         | 25          | Surcharge-late provision                     |                                 | or cover                |
| The Commissioner is authorized to: (check all that apply)   | 1302        | 50  | 2002         | 20          | sheet  | onai ming ice                   | . 61 66761              |
| ☐ Charge fee(s) indicated below ☐ Credit any over payments  | 1053        | 130   | 1053         | 130         | Non-English specificati                      | ion                             |                         |
| ☐ Charge any additional fee(s) during the pendency of this application  | 1812        | -   | 1812         | 2,520       | For filing a request for                     | ex parte ree                    | xamination              |
| ☐ Charge fee(s) indicated below, except for the filing fee to the   | 1804        | 920*  | 1804         | 920*        | Requesting publication<br>action             | of SIR prior                    | to Examiner             |
| above-identified deposit account.   | 1805        | 1,840*  | 1805         | 1,840*      | Requesting publication action                | of SIR after                    | Examiner                |
|   | 1251        | 110   | 2251         | 55          | Extension for reply with                     | hin first mont                  | h                       |
|   | 1252        | 420   | 2252         | 210         | Extension for reply with                     | hin second m                    | nonth                   |
| FEE CALCULATION   | 1253        | 950   | 2253         | 475         | Extension for reply with                     | hin third mon                   | ith                     |
| 1. BASIC FILING FEE   | 1254        | 1,480   | 2254         | 740         | Extension for reply with                     | hin fourth mo                   | onth                    |
| Large Entity Small Entity   | 1255        | 2,010   | 2255         | 1,005       | Extension for reply with                     | hin fifth mont                  | h                       |
| Fee Fee Fee Fee Fee Description Fee Paid  | 1401        | 330   | 2401         | 165         | Notice of Appeal                             |                                 |                         |
| Code (\$) Code (\$)   | 1402        | 330   | 2402         | 165         | Filing a brief in support                    | t of an appea                   | al                      |
| 1001 770 2001 385 Utility filing fee 770.00<br>1002 340 2002 170 Design filing fee  | 1403        | 290   | 2403         | 145         | Request for oral hearing                     | ng                              |                         |
| 1003 530 2003 265 Plant filing fee  | 1451        | 1,510   | 1451         | 1,510       | Petition to institute a pe                   | ublic use pro                   | ceeding                 |
| 1004 770 2004 385 Reissue filing fee  | 1452        | 110   | 2452         | 55          | Petition to revive - una                     | voidable                        |                         |
| 1105 160 2005 80 Provisional filing fee   | 1453        |   |              |             | Petition to revive - unir                    |                                 |                         |
|   | 1501        |   | 2501         | 665         | Utility issue fee (or reis                   |                                 |                         |
| SUBTOTAL (1) (\$) 770.00  | _           | •   | i            |             | ,  | ssue)                           |                         |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from Extra below Fee Paid   | 1502        |   | 2502<br>2503 |             | Design issue fee Plant issue fee             |                                 |                         |
| Total Claims 16 - 20** = X = 0  | 1400        |   | 4400         | 420         | Datitions to the Consuit                     |                                 |                         |
| Indep. Claims 2 - 3** = X = 0   | 1460        | 130   | 1460         | 130         | Petitions to the Commi                       | issioner                        |                         |
| Multiple Dependent =0   | 1807        | 7 50  | 1807         | 50          | Processing fee under 3                       | 37 CFR 1.17                     | (p)                     |
| Large Entity <sub>I</sub> Small Entity  | 1806        | 180   | 1806         | 180         | Submission of Informa                        | tion Disclosu                   | ure Stmt                |
| Fee Fee Fee Fee Fee Fee Description  Code (\$)  | 802         | 40  | 8021         | 40          | Recording each patent property (times numbe  | t assignment<br>er of propertie | per<br>es)              |
| 1202 18 2202 9 Claims in excess of 20   | 1809        | 770   | 2809         | 385         | Filing a submission aften 1.129(a))          | er final rejec                  | tion (37 CFR            |
| 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claim, if not paid                                   | 1810        | 770   | 2810         | 385         |  | ention to be                    | examined                |
| 1203 290 2203 145 Multiple dependent claim, if not paid 1204 86 2204 43 **Reissue independent claims  |             |   | l            |             | For each additional inv<br>(37 CFR 1.129(b)) |                                 |                         |
| over original patent  | 180         | 770   | 2801         | 385         | Request for Continued                        | I Examination                   | n (RCE) 40.00           |
| 1205 18 2205 9 **Reissue claims in excess of 20   | 1802        | 900   | 1802         | 900         | Request for expedited application            | examination                     | of a design             |
| and over original patent  | Other       | fee (spe                                      | cify)        |             |  |                                 |                         |
| SUBTOTAL (2) (\$)0  **or number previously paid, if greater; For Reissue, see above   |             | fuced by                                      |              | Filing F    | ee Paid                                      | SUBTOTA                         | L (3) (\$) <u>40.00</u> |
| SUBMITTED BY  Complete (if applicable)  |             |   |              |             | applicable)                                  |                                 |                         |
| Name (Print/Type) Evan R. Smith   | Regis       | stration N                                    | lo.          | $\neg \top$ | 35,683                                       | Telephone                       | <del></del>             |
|   | 1 (Alloi    | ney/Age                                       | (III)        |             |  | Date                            | 1/30/04                 |
| Signature   |             |   |              |             |  | Date                            | 1 130/07                |

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Kevin Lee MILLER

Appl. No. To Be Assigned

Filed: (Herewith) January 30, 2004

System and Method For Mapping

Pulse Widths In A Digital

Modulator

Confirmation No. To Be Assigned

Art Unit: To Be Assigned

Examiner: To Be Assigned

Atty. Docket: 1875.3910000/RES/ERS

Authorization To Treat A Reply As Incorporating An Extension Of Time Under 37 C.F.R. § 1.136(a)(3)

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Evan R. Smith

Attorney for Applicant Registration No. 35,683

CRA

Date: 1/30/04

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600

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Teresa A. Colella Jeffrey S. Lundgren Victoria S. Rutherford

> Of Counsel Kenneth C. Bass III Evan R. Smith

Admitted only in Maryland Admitted only in Virginia Practice Limited to Federal Agencies

January 30, 2004

WRITER'S DIRECT NUMBER: (202) 772-8807 **INTERNET ADDRESS:** esmith@skgf.com

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450 Mail Stop Patent Application

Re:

U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)

Appl. No. To Be Assigned; Filed: (Herewith) January 30, 2004

System and Method For Mapping Pulse Widths In A Digital

Modulator

Inventors: Our Ref:

Kevin Lee MILLER

1875.3910000/RES/ERS

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

- 1. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
- 2. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
- 3. Recordation Form Cover Sheet;
- An original executed Assignment to **Broadcom Corporation**, recordation 4. of which is hereby respectfully requested;
- 5. PTO Fee Transmittal (Form PTO/SB/17);
- 6. U.S. Utility Patent Application entitled:

System and Method For Mapping Pulse Widths In A Digital Modulator and naming as inventor:

Sterne, Kessler, Goldstein & Fox PLLC.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

Commissioner for Patents January 30, 2004 Page 2

## Kevin Lee MILLER

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. A specification containing:
  - i. 17 pages of description prior to the claims;
  - ii. 4 pages of claims (16 claims);
  - iii. a one (1) page abstract;
- c. 8 sheet(s) of drawings: (Figures 1-7i);
- d. An original executed Declaration;
- 7. Form PTO-2038 Credit Card Payment Form; and
- 8. Two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Evan R. Smith

Attorney for Applicant Registration No. 35,683

RES/ERS/tis
Enclosures
::ODMA\MHODMA\SKGF\_DC1;224872;1

Sterne, Kessler, Goldstein & Fox PLLC. : 1100 New York Avenue, NW : Washington, DC 20005 : 202.371.2600 f 202.371.2540 : www.skgf.com